

A STUDY ON CAUSES OF FEMALE INFERTILITY

ABSTRACT

INTRODUCTION:

Infertility is the inability of a couple to achieve pregnancy over an average period of one year (in a woman under 35 years of age) or 6 months (in a woman above 35 years of age) despite adequate, regular (3-4 times per week), unprotected sexual intercourse. Infertility may also be referred to as the inability to carry a pregnancy to the delivery of a live baby. Infertility can be due to the woman, the man, or both; primary or secondary. In primary infertility, the couples have never been able to conceive; while in secondary infertility there is difficulty in conceiving after having conceived (either carried the pregnancy to term or had a miscarriage).

The World Health Organization (WHO) has defined infertility as a failure to conceive over 12 months of exposure (which is a good practical guide to management), and leaves a longer term residual incidence of infertility of 10–15%. However, the chance to conceive is reduced almost twofold after the age of 35 years. Epidemiological data suggest that approximately 80 million people worldwide are infertile. WHO indicates the highest incidence in some regions of Central Africa where the infertility rate may reach 50%, compared to 20% in the Eastern Mediterranean region, and 11% in the developed world. The WHO estimates the overall prevalence of primary infertility in India to be between 3.9 and 16.8 %.

Infertility has a direct impact on both psychological well-being and social status of women all over the world. A WHO task force revealed that tubal factor accounted for 36%, ovulatory factor for 33%, endometriosis 6%, and no demonstrable causes in 40% of cases.

A similar distribution was found in Asia, Latin America, and the Middle East. In Africa, most of the women were infertile due to tubal factor. The risk factors for infertility can be classified into genital, endocrinal, developmental and general factors. Pelvic inflammatory disease (PID) due to sexually transmitted diseases, unsafe abortion, or puerperal infection is the main cause of tubal infertility mainly caused by chlamydial infection. Polycystic ovarian syndrome (PCOS) is the most commonest cause of anovulatory infertility.

AIMS AND OBJECTIVES

1. To estimate the prevalence of causes of female infertility.
2. To study the different factors responsible for female infertility.

PROCEDURE

After obtaining approval certificate from the institutional committee data collection was started. Women attending Infertility clinic outpatient department, Sree Mookambika Institute of Medical science kulasekaram, who fulfilled the inclusion and exclusion criteria were considered for the study. Total 43 women were included in this study.

After obtaining an informed consent from patients, a detailed history was taken which included patient's education, occupation and socioeconomic status, Menstrual history, coital history, obstetric history, past medical history, family history, personal history and surgical history. A thorough general physical examination with reference to height, weight, pulse, blood pressure, temperature, respiratory rate were noted followed by thyroid and breast examination, Cardiovascular system, respiratory system, abdominal examination, speculum examination, pelvic examination and rectal examination also done and documented.

Investigations including routine blood investigations, Blood sugar, TFT, prolactin, USG abdomen and pelvis were done. HSG and laparoscopy were also done for diagnosing the cause of infertility.

RESULTS

Results of study were as follows : Prevalence of infertility was more among the women belonging to upper middle socio-economic status. Risks of infertility increases as the marital age increase. About 24% of women who came with complaints of infertility had similar family history of infertility.

About 42% of women with infertility were overweight. In this study group 16.3% of women were diabetic , 7% of women were known case of hypothyroid and 4.7% of women had tuberculosis and treated. On pelvic examination of all 43 women 27.9% had foulsmelling vaginal discharge, which is suggestive of genital tract infection. 9.3% had

tender fornices with restricted mobility. 9.3% had bulky uterus, suggestive of adenomyosis or fibroid uterus.

According to ultrasonogram 48.8% of women had PCOD, which is almost half of the total study population. 7% had fibroid uterus. 2.3% had adenomyosis and 9.3% had chocolate cyst. During hysterosalpingographic assessment for tubal patency among our study population, 18.6% of women had bilateral tubal block.

In our study among 43 women who were evaluated for infertility 48.8% had PCOD as the cause for infertility, followed by tubal block which was due to various causes like pelvic inflammatory disease and tuberculosis and followed by fibroid uterus adenomyosis.

CONCLUSION

Infertility is the major issue which has been increasing in rate in this current era. Female factors of infertility should be evaluated thoroughly starting from the history, examination and investigations. Poly Cystic Ovarian Disease(PCOD) is the major cause of female infertility which is increasing in rate due to lifestyle changes. PCOD is also easily treatable and the prognosis is good when compared to the other causes of infertility. PCOD may co-exist with other medical disorders like thyroid dysfunction and hyperprolactinaemia, which should be evaluated and treated accordingly for better results.

Next major cause of female infertility is tubal block which can due to PID, DM and TB, which is identified with the help of Hysteroscopy or Hysterosalpingography. Endometriosis is also found in some female presenting with infertility. Outcome is poor in this group of people as it is not completely treatable.

Laparoscopy is the gold stranded procedure for evaluation of female infertility, which is of both diagnostic and therapeutic use. Very minimal population with infertility presents with fibroid uterus and adenomyosis. There is a category called Unexplained Infertility which is also known as idiopathic infertility, which includes the population whose cause for infertility is not known.

Key words : Female Infertility, PCOD.